

# SB8 beam load cell



## product description

The SB8 bending beam is available in a wide range of capacities from 50kg through to 500kg allowing for a multitude of applications. All stainless steel and hermetically sealed the compact size of the SB8 makes it the ideal choice for multi-head weighing equipment and low capacity vessel and hopper weighing systems.

## applications

Bagging machinery, conveyor scales, vessel and hopper weighing systems.

## key features

Stainless steel construction

Hermetically sealed to IP68

Wide capacity range from 10kg to 500kg

High accuracy

Calibration in mV/V/Ω

## approvals

OIML approval to C3 (Y = 10,000)

NTEP 5,000, Single Cell, Class III  
NTEP 10,000, Single Cell, Class III L

ATEX hazardous area approval for  
zones 0, 1, 2, 20, 21 and 22

FM hazardous area approval

## accessories

Compatible range of hardware

Compatible range of electronics



RoHS  
compliant



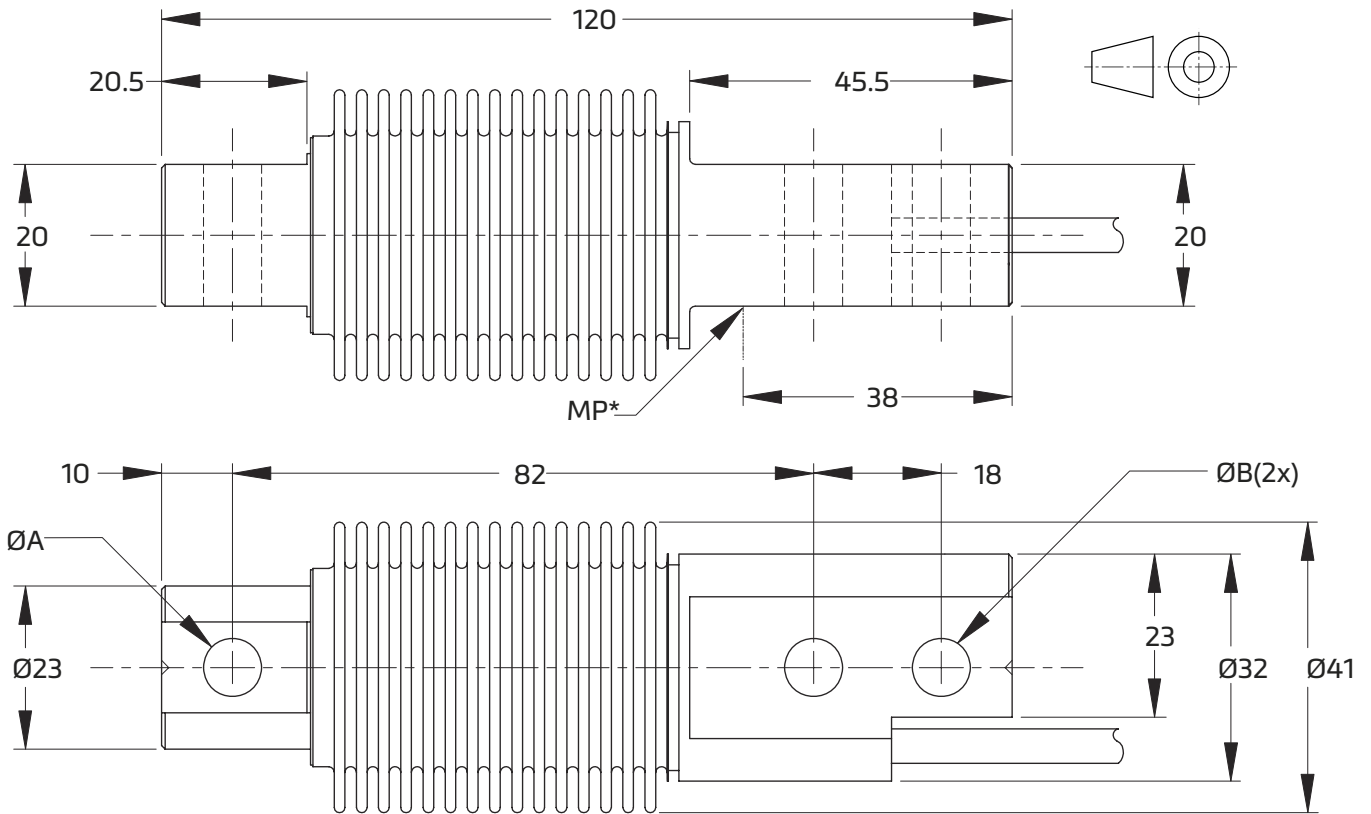
## specifications

Maximum capacity ( $E_{max}$ )	kg	10 / 20 / 30 / 50 / 100 / 200 / 250 / 500	
Accuracy class according to OIML R60		(GP)	C3
Maximum number of verification intervals ( $n_{max}$ )		n.a.	3,000
Minimum load cell verification interval ( $v_{min}$ )		n.a.	$E_{max} / 10,000$
Temperature effect on minimum dead load output ( $TC_0$ )	%*RO/10°C	± 0.0400	± 0.0140
Temperature effect on sensitivity ( $TC_{RO}$ )	%*RO/10°C	± 0.0200	± 0.0100
Combined error	%*RO	± 0.0500	± 0.0200
Non-linearity	%*RO	± 0.0400	± 0.0166
Hysteresis	%*RO	± 0.0400	± 0.0166
Creep error (30 minutes) / DR	%*RO	± 0.0600	± 0.0166
Rated Output (RO)	mV/V	2 ± 0.1%	
Calibration in mV/V/Ω (A...I classified)	%	± 0.05 (± 0.005)	
Zero balance	%*RO	± 5	
Excitation voltage	V	5...15	
Input resistance ( $R_{LC}$ )	Ω	380 ± 10	
Output resistance ( $R_{out}$ )	Ω	350 ± 3	
Insulation resistance (100 V DC)	MΩ	≥ 5,000	
Safe load limit ( $E_{lim}$ )	%* $E_{max}$	200	
Ultimate load	%* $E_{max}$	300	
Safe side load	%* $E_{max}$	100	
Compensated temperature range	°C	-10...+40	
Operating temperature range	°C	-40...+80 (ATEX -40...+60)	
Load cell material		stainless steel 17-4 PH (1.4548)	
Protection according EN 60 529		IP68 (up to 2 m water depth)	
Packet weight	kg	0.62 (10-20kg), 0.64 (50-250kg), 0.8 (500kg)	

The limits for Non-Linearity, Hysteresis, and  $TC_{RO}$  are typical values.

The sum of Non-linearity, Hysteresis and  $TC_{RO}$  meets the requirements according to OIML R60 with pLC=0.7.

## product dimensions (mm)



Type	A	B	Mounting bolts	Torque*
10...250 kg	8.2	8.2	M8 8.8	25 Nm
500 kg	10.5	8.2	M8 10.9	35 Nm

Torque\* - values assume oiled threads.

MP\* - Edge of mounting plage

## wiring

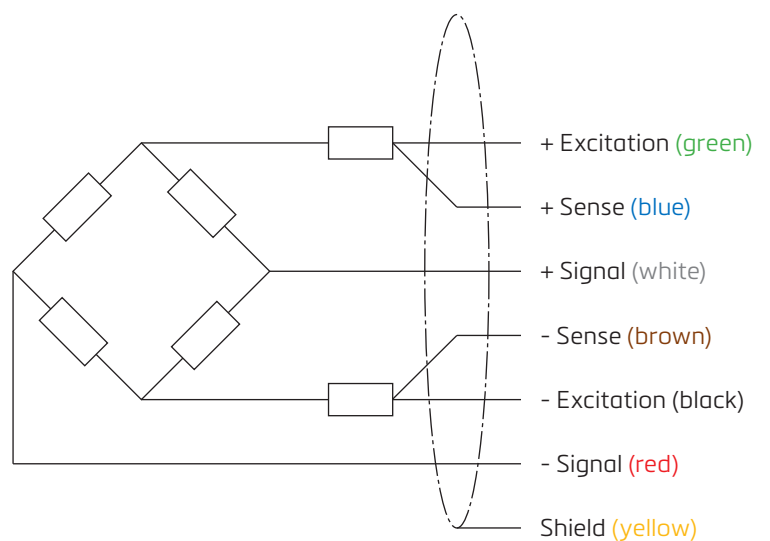
The load cell is provided with a shielded, 6 conductor cable (AWG 26).

Cable jacket polyurethane

Cable length: 3 m

Cable diameter: 5.8 mm

The shield is connected to the load cell body



Specifications and dimensions are subject to change without notice.